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Dated: 7-17-06 Signature: Maura A. Gallagher  
(Maura A. Gallagher)

Docket No.: BBNT-P01-134  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Brig B. Elliott

Application No.: 09/944328

Confirmation No.: 1878

Filed: August 31, 2001

Art Unit: 2131

For: QUANTUM CRYPTOGRAPHIC KEY  
DISTRIBUTION NETWORKS WITH  
UNTRUSTED SWITCHES

Examiner: J. E. Jackson

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (IDS)**

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Supplemental Information Disclosure Statement is filed more than three months after the U.S. filing date, OR more than three months after the date of entry of the national stage of a PCT application, AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)).

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

In accordance with 37 CFR 1.97(g), the filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Supplemental Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Supplemental Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Please charge our Deposit Account No. 18-1945 in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 18-1945, under Order No. BBNT-P01-134. A duplicate copy of this paper is enclosed.

Dated: July 17, 2006

Respectfully submitted,

By 

Edward A. Gordon

Registration No.: 54,130

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Attorneys/Agents For Applicant



PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				Application Number	09/944328
				Filing Date	August 31, 2001
				First Named Inventor	Brig B. Elliott
				Art Unit	2131
				Examiner Name	A. Sherkat
Sheet	1	of	2	Attorney Docket Number	BBNT-P01-134

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA	US-2002/0025041	02-2002	Tomita, Akihisa	
	AB	US-2003/0002074	01-2003	Nambu et al.	
	AC	US-2003/0059157	03-2003	DeCusalis et al.	
	AD	US-2004/0005056	01-2004	Nishioka et al.	
	AE	US-2004/0008843	01-2004	Van Enk, Steven J.	
	AF	US-5,515,438	05-1996	Bennett et al.	
	AG	US-5,720,608	03-1998	Janson et al.	
	AH	US-6,151,586	11-2000	MacDonald et al.	
	AI	US-6,188,768	02-2001	Bethune et al.	
	AJ	US-6,289,104	09-2001	Patterson et al.	
	AK	US-6,378,072	04-2002	Collins et al.	
	AL	US-6,539,410	03-2003	Klass, Michael Jay	
	AM	US-6,801,626	10-2004	Nambu, Yoshihiro	
	AN	US-6,986,056	01-2006	Dultz et al.	
	AO	US-7,035,411	04-2006	Azuma et al.	
	AP	US-6,160,651	12-2000	Chang et al.	
	AQ	US-5,729,608	03-1998	Janson et al.	
	AR	US-6,052,465	04-2000	Gotoh et al.	
	AS	US-6,778,557	08-2004	Yuki et al.	
	AT	US-6,895,092	05-2005	Yomita	
	AU	US-2002/0141019	10-2002	Chang et al.	
	AV	US-6,519,062	02-2003	Yoo, Sung-Joo	
	AW	US-6,145,024	11-2000	Maezawa et al.	
	AX	US-6,647,010	11-2003	Ford et al.	
	AY	US-6,799,270	09-2004	Bull et al.	
	AZ	US-5,307,410	04-1994	Bennett	
	AA1	US-2004/0165884	08-2004	Al-Chalabi, Salah	
	AB1	US-6,594,055	07-2003	Snawerdt, Peter	
	AC1	US-4,770,535	09-1988	Kim et al.	
	AD1	US-2004/0190725	09-2004	Yuan et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
Examiner Signature		Date Considered	

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Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	09/944328
				Filing Date	August 31, 2001
				First Named Inventor	Brig B. Elliott
				Art Unit	2131
				Examiner Name	A. Sherkat
Sheet	2	of	2	Attorney Docket Number	BBNT-P01-134

	CA	Bennett, C.H., et al., "Experimental Quantum Cryptography," J. Cryptology, 5:3-28 (1992).	
	CB	Bennett, C.H., "Quantum Cryptography Using Any Two Nonorthogonal States," Physical Review Letters, 68(21):3121-3124 (1992).	
	CC	Butler, W.T., et al. "Free space quantum-key distribution," Physical Review A, 57(4):2379-2382 (April 1998).	
	CD	Jacobs, B.C., et al., "Quantum cryptography in free space," Optics Letters, 21(22):1854-1856 (November 1996).	
	CE	Bethune, D.S., et al., "An Autocompensating Fiber-Optic Quantum Cryptography System Based on Polarization Splitting of Light, IEEE Journal of Quantum Electronics, 36(3):340-347 (2000)	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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IFW 2131

PTO/SB/17 (12-04v2)  
Approved for use through 7/31/2006. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person is required to respond to a collection of information unless it displays a valid OMB control number.

<b>Effective on 12/08/2004.</b> <b>Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).</b>		<b>Complete if Known</b>	
<b>FEE TRANSMITTAL</b> <b>For FY 2005</b>		Application Number	09/944328
		Filing Date	August 31, 2001
		First Named Inventor	Brig B. Elliott
		Examiner Name	J. E. Jackson
		Art Unit	2131
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27		Attorney Docket No.	BBNT-P01-134
<b>TOTAL AMOUNT OF PAYMENT</b>		<b>(\$)</b>	<b>180.00</b>

**METHOD OF PAYMENT** (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_

☒ Deposit Account Deposit Account Number: 18-1945 Deposit Account Name: Fish & Neave IP Group, Ropes & Gray LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

**FEE CALCULATION**

**1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES**

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

**Total Claims**      **Extra Claims**      **Fee (\$)**      **Fee Paid (\$)**      **Multiple Dependent Claims**

\_\_\_\_\_ - = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_      **Fee (\$)**      **Fee Paid (\$)**

**Indep. Claims**      **Extra Claims**      **Fee (\$)**      **Fee Paid (\$)**

\_\_\_\_\_ - = \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

**Total Sheets**      **Extra Sheets**      **Number of each additional 50 or fraction thereof**      **Fee (\$)**      **Fee Paid (\$)**

\_\_\_\_\_ - 100 = \_\_\_\_\_ /50 \_\_\_\_\_ (round up to a whole number) x \_\_\_\_\_ = \_\_\_\_\_

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): 1806 Submission of an Information Disclosure Statement      **Fees Paid (\$)** 180.00

<b>SUBMITTED BY</b>			
Signature		Registration No. (Attorney/Agent)	54,130
Name (Print/Type)	Edward A. Gordon	Telephone	(617) 951-7066
		Date	July 12, 2006

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Dated: 7-17-06      Signature: Maura A. Gallagher (Maura A. Gallagher)